

AS: Browser - (G:\S and coastal\WO 2002\770 A1) [Page 3 of 11] [Doc 3/21 "Full" 11/16] [Total images 16] [Marked]
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PUB-NO: WO002080770A1
DOCUMENT-IDENTIFIER: WO 2080770 A1
TITLE: METHOD FOR MEASURING OF EDEMA
PUBN-DATE: October 17, 2002

INVENTOR-INFORMATION:
NAME ALANEN, ERKO COUNTRY FI
LAHTINEN, AULIS TAPANI COUNTRY FI
NUUTINEN, JOUNI COUNTRY FI

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LAHTINEN AULIS TAPANI COUNTRY FI
NUUTINEN JOUNI COUNTRY FI

APPL-NO: FI00200234
APPL-DATE: March 21, 2002

PRIORITY-DATA: FI20010601A (March 23, 2001)
INT-CL (IPC): A61B005/053
EUR-CL (EPC): A61B005/05

ABSTRACT:
CHG DATE=20021203 STATUS=N>The invention relates to a method for measuring tissue edema. By a method in accordance with the invention an electromagnetic probe (24) is placed on the skin, and the capacitance of the probe is proportional to the dielectric constant of the skin and subcutaneous fat, which

FIG. 2

	Document ID	Kind Codes	Source	Issue Date	Pages	
1	JP 62156582 A		JPO	19870711	4	DETEC
2	JP 61086662 A		JPO	19860502	4	APPAR
3	WO 2080770 A1		EPO	20021017	15	METHOD
4	WO 2056418 A1		EPO	20020718		ELECT
5	US 20020109497 A		DERWENT	20020815		Elect
6	JP 08233877 A		DERWENT	19960913		Elect
7	EP 492392 A		DERWENT	19920701		Eddy

PUB-NO: WO02056418A1

DOCUMENT-IDENTIFIER: WO 2056418 A1

TITLE: ELECTROMAGNETIC PROBE

PUBN-DATE: July 18, 2002

INVENTOR-INFORMATION:

NAME	COUNTRY
BRACHAT, PATRICE	N/A
DEVILLERS, FREDERIC	N/A
RATAJCZAK, PHILIPPE	N/A
BILLS, RAYMOND	N/A

ASSIGNEE-INFORMATION:

NAME	COUNTRY
FRANCE TELECOM	FR

APPL-NO: FR00200072

APPL-DATE: January 10, 2002

PRIORITY-DATA: FR00100390A (January 12, 2001)

INT-CL (IPC): H01Q013/04, H01Q021/20

ABSTRACT:

The invention concerns an electromagnetic probe characterised in that it comprises at least an assembly including in combination: a coaxial feeder link (401), a ground plane (250) connected to the outer sheath (404) of the coaxial drive connection; a reflecting cone (100) arranged opposite the ground plane (250), and configured to define an impedance at least substantially constant along its profile; and a dielectric medium (400) interposed at least partly between the reflecting cone (100) and the ground plane (250).

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	Document ID	Kind Codes	Source	Issue Date	Pages	
1	JP 62156582 A		JPO	19870711	4	DETEC
2	JP 61086662 A		JPO	19860502	4	APPAR
3	WO 2080770 A1		SPO	20021017	16	METHO
4	WO 2056418 A1		EPO	20020718	31	ELECT
5	US 20020109497 A		DERWENT	20020815		Elect
6	JP 08233877 A		DERWENT	19960913		Elect
7	EP 492392 A		DERWENT	19920701		Eddy
8	EP 51018 A		DERWENT	19820505		Elect

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(12) DEMANDE INTERNATIONALE PUBLIÉE EN VERTU DU TRAITÉ DE COOPÉRATION EN MATIÈRE DE BREVETS (PCT)

(19) Organisation Mondiale de la Propriété Intellectuelle
Bureau International



NO 02/056418 A1

(43) Date de la publication internationale
18 juillet 2002 (18.07.2002)

PCT

(10) Numéro de publication internationale
WO 02/056418 A1

(51) Classification internationale des brevets:
H01Q 13/04, 21/20

(71) Déposant: FRANCE TELECOM (FR/FR); 6, place d'Alger, F-75015 Paris (FR).

(72) Inventeurs: BRACHAT, Patrice; Les Jardins du Cimetière, Les Jumeaux, 26 avenue du Fleury, F-93000 St-Denis (FR); DEVILLERS, Frédéric; 51 Boulevard Louis Boule, F-06500 Nices (FR); RATAJCZAK, Philippe; Bpwe Bergriffen, 66 Avenue Bergriffen, F-06100 (FR); BILLS, Raymond; Le Cap Vert/A, 15 Avenue Vilem, F-016190 Riquetville-Cap-Martin (FR).

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(74) Mandataires: MARTIN, Jean-Jacques snc; Cabinet Représentant, 20, rue de Chancellerie, F-75847 Paris Cedex 17 (FR).

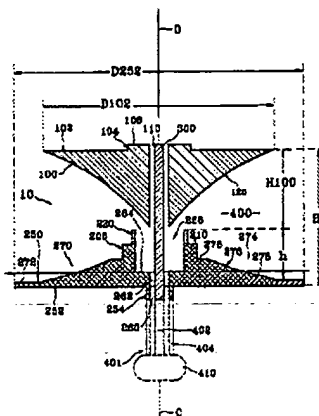
(75) Mandataires: MARTIN, Jean-Jacques snc; Cabinet Représentant, 20, rue de Chancellerie, F-75847 Paris Cedex 17 (FR).

(76) Mandataires: MARTIN, Jean-Jacques snc; Cabinet Représentant, 20, rue de Chancellerie, F-75847 Paris Cedex 17 (FR).

[Suite sur la page suivante]

(54) Titre: ELECTROMAGNETIC PROBE

(54) Titre: SONDE ELECTROMAGNETIQUE



(57) Abstract: The invention concerns an electromagnetic probe characterized in that it comprises at least an assembly including in combination: a coaxial feeder link (401), a ground plane (250) connected to the outer sheath (404) of the coaxial drive connection; a reflecting cone (100) arranged opposite the ground plane (250), and configured to define an impedance at least substantially constant along its profile; and a dielectric medium (400) interposed at least partly between the reflecting cone (100) and the ground plane (250).

(57) Abrégé: La présente invention concerne une sonde électromagnétique caractérisée par le fait qu'elle comporte au moins un ensemble comprenant: un connecteur coaxial (401) de type coaxial, - en son plan de son (250) relié à la gaine extérieure (404) de la liaison d'attaque coaxiale, - un cône réflecteur (100) placé en regard du plan de son (250), et configuré pour définir une impédance au moins substantiellement constante le long de son profil, et - un milieu diélectrique (400) interposé au moins en partie entre le cône réflecteur (100) et le plan de son (250).

WO 02/056418 A1

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FIG. 4, is a diagram of the phase law across the aperture of the antenna of FIG. 1.

FIG. 5, is a view of the radiation diagrams of an antenna according to the invention and of a conventional discone antenna, and

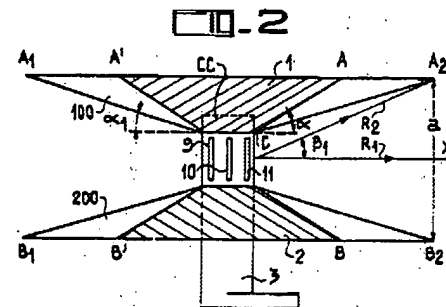
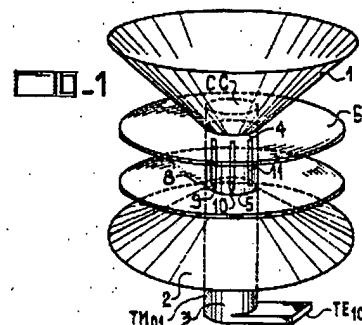
FIG. 6, is a graph showing the width of the diagram in elevation as a function of the ratio between the length of the discs and the wavelength.

DETAILED DESCRIPTION:

(1) DESCRIPTION OF THE INVENTION

(2) FIG. 1 shows an omnidirectional antenna according to the invention. It comprises two truncated metal cones 1 and 2 which are attached to a waveguide 3 of circular cross-section which forms the feed guide and which is closed off at one end by a short-circuit CC. The intersections between the truncated cones 1 and 2 and the waveguide 3 are at two cross-sectional planes 4 and 5 which have spaced between them a considerable length of the guide 3. Two discs 6 and 7 of dielectric material are attached to the truncated cones 1 and 2 at the points where these cross-sectional planes 4 and 5 are situated so that the bases of the truncated cones and the surfaces of the discs of dielectric material are parallel and lie perpendicular to the feed waveguide 3. The part 8 of the feed waveguide contains an array of equidistant slots of which only three, 9, 10, and 11, can be seen in the Figure.

(3) In the view shown in FIG. 1, these slots are parallel to the axis of the guide 3. Their orientation may however be different and the slots may be vertical, horizontal or oblique, depending on whether the polarisation of the wave which is used is horizontal, vertical or circular. The mode of excitation would also change, being TM₀₁ in the case of the Figure and TE₀₁ in the case



Document ID	Kind Codes	Source	Issue Date	Pages	
US 4692770 A		USPAT	19870908	7	Vehic
			0924	7	Colls
			0930	9	Multi
			0819	4	Secur
			1009	7	Mobil
			0906	7	Connid
			0813	6	POLAR

for
10/044443

AST Browser - 144 (1) 361802/0000 (US 3987456) Page 5 (Doc 3987456 of 770) (Total images 10)

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US-PAT-NO: 3987456

DOCUMENT-IDENTIFIER: US 3987456 A

TITLE: Wide relative frequency band and reduced size-to-wavelength ratio antenna

----- KWIC -----

US Reference Patent Number - URPN (3): 3613107

Details Tool Image HTML KWIC

	Document ID	Kind Codes	Source	Issue Date	Pages	
3	US 5608416 A		USPAT	19970304	12	Porta
4	US 4851859 A		USPAT	19890725	9	Tunab
5	US 4691209 A		USPAT	19870901	12	Wideb
6	US D289163 S		USPAT	19870407	3	Anten
7	US 4608572 A		USPAT	19860826	18	Broad
8	US 4352109 A		USPAT	19820928	9	End s
9	US 3987456 A		USPAT	19761019	10	Wide
10	US 3919710 A		USPAT	19751111	15	Porta

Details Tool Image HTML Full

U.S. Patent Oct. 19, 1976 Sheet 6 of 6 3,987,456

FIG. 6

FIG. 7

US-PAT-NO: 3919710
DOCUMENT-IDENTIFIER: US 3919710 A
TITLE: Turnstile and flared cone UHF antenna

----- KWIC -----

US Reference Patent Number - URPN (1):
3619107

Details Text Image HTML KWIC

	Document ID	Kind Codes	Source	Issue Date	Pages	
4	US 4851859 A		USPAT	19890725	9	Tunab
5	US 4691209 A		USPAT	19870901	12	Wideb
6	US D289163 S		USPAT	19870407	3	Anten
7	US 4608572 A		USPAT	19860826	18	Broad
8	US 4352109 A		USPAT	19820928	9	End s
9	US 3987456 A		USPAT	19761019	10	Wide
10	US 3919710 A		USPAT	19751111	5	Turns
11	US 3787865 A		USPAT	19740122	10	INTRCO

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U.S. Patent Nov. 11, 1975

3,919,710

FIG. 1

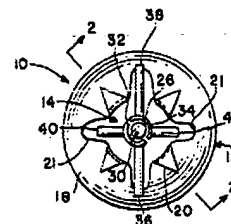


FIG. 2

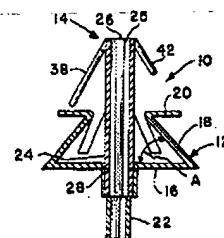
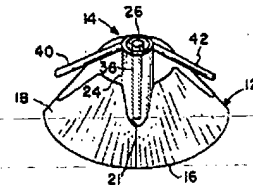


FIG. 3



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Full

US-PAT-NO: 6084551
DOCUMENT-IDENTIFIER: US 6084551 A
TITLE: Electromagnetic probe for the detection of e-field and h-field radiation

US Reference Patent Number - URPN (3):
3611362

U.S. Patent Jul. 4, 2000 Sheet 5 of 8 6,084,551

FIG. 6

Diagram illustrating a probe structure (FIG. 6) with three overlapping circular elements labeled 28, 30, and 32. A dashed line 10 indicates a path or boundary.

Document ID	Kind Codes	Source	Issue Date	Pages	Method
US-6456070-B1		USPAT	20020924	16	METHOD
US 6084551 A		USPAT	20000704	13	Electromagnetic probe for the detection of e-field and h-field radiation
US 3721900-A		USPAT	19730320	5	MICROWAVE

US-PAT-NO: 3721900

DOCUMENT-IDENTIFIER: US 3721900 A

TITLE: MICROWAVE DETECTION INSTRUMENT AND ANTENNA THEREFOR

----- KWIC -----

US Reference Patent Number - URPN (6):
3611362

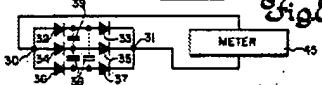
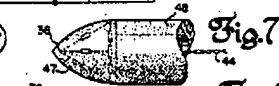
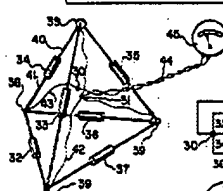
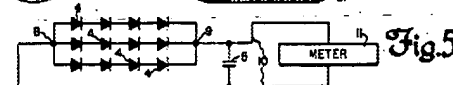
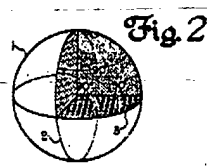
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	Document ID	Kind Codes	Source	Issue Date	Pages	
1	US 6456070 B1		USPAT	20020924	16	METHOD
2	US 6084551 A		USPAT	20000704	13	Electr
3	US 3721900 A		USPAT	19730320	5	MICROWA

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PATENTED MAR 20 1973

3,721,900



INVENTOR
CHARLES L. ANDREWS
BY *Red A. Harris*
HIS ATTORNEY

US-PAT-NO: 5714888

DOCUMENT-IDENTIFIER: US 5714888 A
See image for Certificate of Correction

TITLE: Method and apparatus for testing electronic circuitry in a manufacturing environment

DATE-ISSUED: February 3, 1998

INVENTOR-INFORMATION:
NAME CITY STATE ZIP CODE
COUNTRY TYPE CODE
Motorola, Inc. Schaumburg IL N/A N/A

ASSIGNEE INFORMATION:
NAME CITY STATE ZIP CODE
COUNTRY TYPE CODE
Motorola, Inc. Schaumburg IL N/A N/A

APPL-NO: 08/ 578406

DATE FILED: December 26, 1995

INT-CL: [06] G01R031/308

US-CL-ISSUED: 324/750, 324/501

US-CL-CURRENT: 324/750, 324/501

FIELD-OF-SEARCH: 324/750; 324/158.1; 324/639; 324/538; 324/501

REF-CITED:

PAT-NO	ISSUE-DATE	PATENTEE-NAME
US-CL		
4876656	October 1989	Leicht et al.
3647491	N/A	N/A
5218294	June 1993	Soiferman
3247538	N/A	N/A
5424633	June 1995	Soiferman
3247538	N/A	N/A

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Document ID	Kind Codes	Source	Issue Date	Pages	Notes
US 5714888 A		USPAT	19980203	10	Metho
US 5696372 A		USPAT	19971209	10	High
US 5675259 A		USPAT	19971007	15	Metho
US 5670886 A		USPAT	19970923	15	Metho
US 5640092 A		USPAT	19970617	13	Elect
US 5619997 A		USPAT	19970415	8	Passi
US 5608328 A		USPAT	19970304	14	Metho
US 5596150 A		USPAT	19970121	13	Comp

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United States Patent Naujoks

US00571488A

Patent Number: 5,714,888

Date of Patent: Feb. 3, 1998

METHOD AND APPARATUS FOR TESTING ELECTRONIC CIRCUITRY IN A MANUFACTURING ENVIRONMENT

Inventor: Adolph C. Naujoks, Coral Springs, Fla.

Assignee: Motorola, Inc., Schaumburg, Ill.

Appl. No.: 578,406

Filed: Dec. 26, 1995

Int. Cl. G01R 31/28

U.S. Cl. 324/750, 324/501

Field of Search: 324/750, 158.1, 324/639, 538, 501

References Cited

U.S. PATENT DOCUMENTS

4,876,656	10/1989	Leicht et al.	364,491
5,218,294	06/1993	Soiferman	324,538
5,424,633	06/1995	Soiferman	324,538
5,517,110	01/1996	Soiferman	324,538

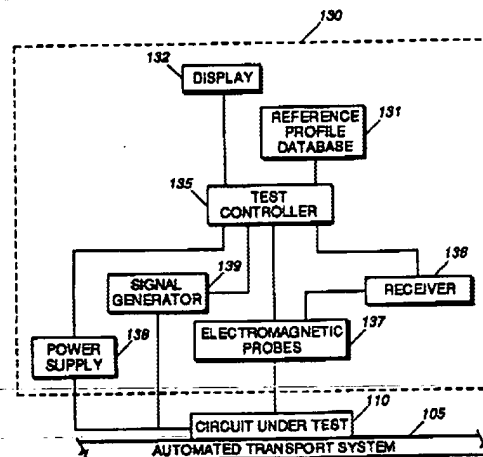
Primary Examiner—Brian P. Kautz

Attorney Agent or Firm—Andrew S. Puller

ABSTRACT

A manufacturing environment (100) includes test equipment (130) that tests circuitry (110) for functional operation. An electromagnetic probe (137) is operably adjacent to a substrate having electronic circuitry to be tested (310). The electromagnetic probe is activated to directly transmit a localized portion of the electronic circuitry with a wireless signal (330). Functional operation of the circuitry is determined by measuring the response of the electronic circuitry (330, 340). In one embodiment, an array of electromagnetic probes is operated to receive near-field electromagnetic emissions emanating from the circuitry. These emissions are measured and an electromagnetic profile generated for a portion of the circuitry (334). The electromagnetic profile is analyzed to determine functional operation of the circuitry (340).

18 Claims, 4 Drawing Sheets



100

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PATENT-ASSIGNEE: MOTOR & TURBIN UNION MUN[MOTU]

PRIORITY-DATA: 197608-2654863 (December 3, 1976)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
DE 2654863 B	April 20, 1978	N/A	000
FR 2373044 A	August 4, 1978	N/A	000
GB 1592990 A	July 15, 1981	N/A	000
IT 1090803 B	June 26, 1985	N/A	000
US 4150566 A	April 24, 1979	N/A	000

INT-CL (IPC): F02C007/00, G01L003/10

ABSTRACTED-PUB-NO: DE 2654863B

BASIC-ABSTRACT:

The rotational moment measuring device, for an aircraft jet engine, uses four cylinders (17, 27, 28, 29), each coaxial to the longitudinal axis (L) of the device and at least partially fitting one inside the other. A transfer coupling (30, 31, 32) is positioned between each two cylinders (17, 27; 27, 28; 28, 29) so that the rotational moment is transmitted from the outermost cylinder (17), to the innermost cylinder (28) and back to the next cylinder (29) to this. A further coupling (33) is provided between the latter cylinder (29) and the second outermost cylinder (27).

Two parallel toothed discs (37, 38) of similar diameter are associated with the latter two cylinders, the relative rotation of which is proportional to the torsion of the innermost cylinder (28) due to the rotational moment and this relative rotation monitored by ~~electromagnetic devices~~ (39, 40).

TITLE-TERMS: ROTATING MOMENT MEASURE DEVICE AIRCRAFT JET ENGINE FOUR COAXIAL CYLINDER ELECTROMAGNET PROBE

DERIVENT-CLASS: Q52 802

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U	I	Document ID	Issue Date	Pages	Title
16	<input type="checkbox"/>	FR 2566525 A	19851227	9	Liq. level detector for anaerob annular float slidable on vert.
17	<input type="checkbox"/>	EP 51018 A	19820505	22	Electromagnetic probe for miner spiral conductors on cylindrica
18	<input type="checkbox"/>	SU 909254 B	19820228	NA	Rotary piston engine power regu connected to engine shaft by re
19	<input checked="" type="checkbox"/>	DE 2654863 B	19760420	6	Rotational moment measuring dev engine and uses four coaxial cy

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U.S. Patent Apr. 24, 1979 Sheet 2 of 2 4,150,566

FIG 2

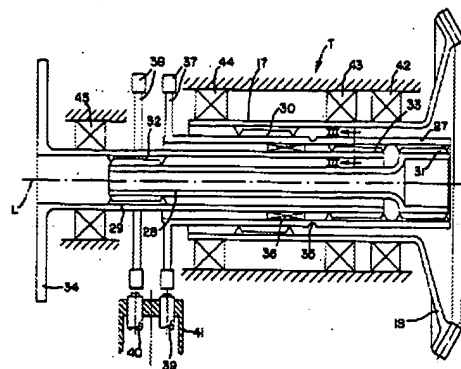
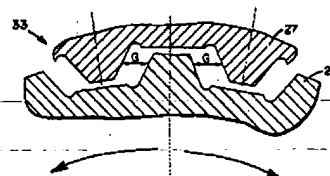


FIG 3



SIMULTANEOUS DETERMINATION OF VARIOUS PARAMETERS OF AN ASSOCIATED CYLINDRICAL TARGET

PUBN-DATE: March 20, 1997

INVENTOR-INFORMATION:

NAME: LE, MINH-QUANG COUNTRY: FR
PLACKO, DOMINIQUE COUNTRY: FR

ASSIGNEE-INFORMATION:

NAME: SAGEM COUNTRY: FR
LE MINH QUANG COUNTRY: FR
PLACKO DOMINIQUE COUNTRY: FR

APPL-NO: FR09601379

APPL-DATE: September 9, 1996

PRIORITY-DATA: FR09510605A (September 11, 1995)

INT-CL (IPC): G01R033/12, G01V003/10

EUR-CL (EPC): G01V003/10

ABSTRACT:

CHG DATE=19970502 STATUS=O>The cylindrical electromagnetic sensor comprising at least one circular cross-section cylindrical coil (2) associated to a core (1) with high magnetic permeability, is characterized in that the core (1) is a cylinder having a circular cross section, in that the coil (2) is fixed to a side face of the core and comprises a symmetry axis coaxial to the core face on which it is fixed, and in that the core (1) has a thickness (E) larger than the thickness (e) of the coil so that the magnetic field lines resulting from the excitation of the coil are substantially all of them included in the core.

U	I	Document ID	Issue Date	Pages	Title
2		JP 61086662 A	19860502	4	APPARATUS FOR DETECTING CORONA
3		WO 2080770 A1	20021017	16	METHOD FOR MEASURING OF EDEMA
4		WO 2056418 A1	20020718	31	ELECTROMAGNETIC PROBE
5		WO 9710516 A1	19970320	25	CYLINDRICAL ELECTROMAGNETIC SEN
6		US 20020109497; 20020815		13	SIMULTANEOUS DETERMINATION OF V
		A			Electromagnetic probe/detector
					plane with constant profile imp

INTERNATIONAL SEARCH REPORT

Date of Application No
PCT/FR 96/01970

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G01R33/12 G01V3/10

B. FIELDS SEARCHED

Maximum documentation searched (classification system followed by classification symbols)
IPC 6 G01R G01V H03K

Documentation searched other than maximum documentation in the above (list each document included in the field searched)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Character of document, with indication, where appropriate, of the relevant passages	Relevance to claim No.
A	US 4 495 465 A (TOMATUOLD FRANK G ET AL) 22 January 1985 S&B Column 3, line 63 - column 4, line 23; figure 3	1,2
A	US 5 065 093 A (MAUTA HENDRIKUS C ET AL) 12 November 1991 see abstract	
A	IBM TECHNICAL DISCLOSURE BULLETIN, vol. 2, no. 5, February 1969, NEW YORK, US, pages 92-93, XP002005899 LAMOREAUX: "Core Testing Device. February 1969." see the whole document	1,2

☐ Further documents are listed in the classification of item C.

☒ Patent family documents are listed in abstract.

* Special categories of cited documents:

"A" documents defining the general state of the art which is not considered to be of primary importance
"B" expert opinions published in or after the international filing date
"C" documents which may throw doubts on priority date(s) or which it is used to establish the publication date of earlier claims or other special reasons (as specified)
"D" documents referring to an oral disclosure, use, exhibition or other means
"E" documents published prior to the international filing date but later than the priority date claimed

"F" documents published after the international filing date or priority date and not so considered with the application but cited to substantiate the principles or theory underlying the invention
"G" documents of particular relevance the claimed invention cannot be substantially derived or would be considered to involve an inventive step when the document is taken alone
"H" documents of particular relevance the claimed invention cannot be considered to involve an inventive step when the document is considered with one or more other cited documents, such combinations being relevant to a system disclosed in the art
"I" document number of the same patent family

Date of the actual completion of the international search

28 October 1996

Date of mailing of the international search report

30. 10. 96

Name and mailing address of the ISA
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NL-2200 MB Rijswijk
Tel. (+31) (0) 78 639 266, Telex: 511 390
Fax: (+31) (0) 78 639 276

Authorized officer

Swartjes, H

Form PCT/ISA/209 (second sheet) (July 1995)